

AllRatesToday

Currency Data API Specifications

Version 1.0 — April 2026

<https://allratetoday.com>

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1 Overview

The AllRatesToday Currency Data API is a RESTful web-services API that provides real-time and historical currency exchange rate data for over 160 world currencies. The API delivers institutional-grade mid-market rates sourced from Reuters (Refinitiv) and interbank market feeds — the same rates used by banks, financial institutions, and services like Google Finance.

This document provides a complete technical reference for integrating with the AllRatesToday API, including authentication, endpoints, parameters, response formats, error handling, and SDK usage across multiple programming languages.

1.1 Schema

- The API is accessed exclusively using the **HTTPS** protocol.
- The API is accessed from the domain allratetoday.com.
- All data is sent and received in **JSON** format by default.
- All API responses include appropriate **CORS headers** for browser-based access.
- Responses are **Gzip compressed** for minimal bandwidth usage.

1.2 Base URL

All API requests should be made to the following base URL:

```
https://allratetoday.com/api/v1/
```

The API is deployed on Cloudflare's global edge network across 300+ locations, delivering sub-50ms response times worldwide.

1.3 Authentication

All requests to the authenticated API endpoints must include a valid API key. Authentication is performed via a **Bearer token** in the HTTP Authorization header.

Your API key is provided when you register for the service at:

```
https://allratetoday.com/register
```

API keys follow the format:

```
art_live_XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

1.3.1 Authentication Example Using curl

```
curl -H "Authorization: Bearer art_live_your_api_key" \  
"https://allratetoday.com/api/v1/rates?source=USD&target=EUR"
```

1.3.2 Authentication Example Using JavaScript

```
const response = await fetch(  
  "https://allratetoday.com/api/v1/rates?source=USD&target=EUR",  
  {  
    headers: {
```

```
"Authorization": "Bearer art_live_your_api_key"
}
}
);
```

1.3.3 Failed Authentication

Authenticating with invalid credentials will return **401 Unauthorized**:

```
HTTP/1.1 401 Unauthorized

{
  "error": "Invalid or missing API key",
  "docs": "https://allratetoday.com/docs"
}
```

1.4 Specifying the API Version

You specify the version of the API by including it in the URI path:

```
https://allratetoday.com/api/v{version_no}/...
```

Where `{version_no}` is an integer identifying the version. The current and only version is **v1**.

Example:

```
https://allratetoday.com/api/v1/rates?source=USD&target=EUR
```

1.5 Data Format

The API returns data in **JSON format** exclusively. All responses use the `Content-Type: application/json` header.

A typical successful response structure:

```
{
  "rate": 0.9234,
  "source": "USD",
  "target": "EUR",
  "time": "2026-04-12T14:30:00Z"
}
```

1.6 Timestamp Format

All timestamps returned in API responses use the **ISO 8601** format:

```
YYYY-MM-DDThh:mm:ssZ
```

The "Z" suffix indicates UTC time. For historical data endpoints, timestamps include millisecond precision where available.

1.7 Package Limits

The number of API requests available to you is determined by the service package you selected at sign-up. Each rate returned counts as one API request toward your monthly package limit.

Package	Monthly Requests	Rate Limit	Price
Free	300	10 req/min	\$0/month
Small	5,000	10 req/min	\$9/month
Medium	10,000	Unlimited	\$49/month
Large	100,000	Unlimited	\$99/month
Custom	Negotiable	Unlimited	Contact us

When you request multiple target currencies in a single query, each currency counts as one request. For example, converting USD to EUR, GBP, and JPY counts as **3 requests**.

When you have exhausted your monthly allowance, further requests will return **429 Too Many Requests** until your new monthly period begins.

1.7.1 Package Limit Headers

You can monitor your usage via the response headers included with every API response:

Header Name	Description
X-Monthly-Limit	The maximum number of requests permitted per month for your package.
X-Monthly-Used	The number of requests used in the current monthly period.
X-Monthly-Resets	The ISO 8601 timestamp when your monthly usage counter resets.
X-RateLimit-Limit	The maximum number of requests permitted per rate-limit window.
X-RateLimit-Remaining	The number of requests remaining in the current rate-limit window.
X-RateLimit-Reset	The UTC epoch timestamp when the rate-limit window resets.

1.8 Rate Limiting

All requests to the API are subject to rate limiting over a time window to ensure fair usage and prevent excessive requests due to technical errors.

If you exceed the rate limit, you will receive:

```
HTTP/1.1 429 Too Many Requests

{
  "error": "Monthly API request limit reached",
  "limit": 300,
  "used": 300,
  "resetsAt": "2026-05-01T00:00:00Z",
  "upgrade": "https://allratetoday.com/pricing"
}
```

1.9 CORS Support

The API supports Cross-Origin Resource Sharing (CORS), allowing browser-based JavaScript applications to make requests directly to the API. All endpoints return appropriate CORS headers including:

- Access-Control-Allow-Origin: *
- Access-Control-Allow-Methods: GET, OPTIONS
- Access-Control-Allow-Headers: Authorization, Content-Type

1.10 Error Handling

The API uses standard HTTP status codes to indicate success or failure. All error responses include a JSON body with an **error** field describing the issue.

HTTP Status	Code	Message
200 OK	—	Request succeeded. Response body contains the requested data.
400 Bad Request	400	Missing or invalid query parameters (e.g., invalid currency code).
401 Unauthorized	401	Missing, invalid, or disabled API key.
403 Forbidden	403	Account disabled or suspended. Contact support.
429 Too Many Requests	429	Monthly package limit or rate limit exceeded.
500 Internal Server Error	500	Unexpected server error. Please retry or contact support.

2 API Endpoints

This section describes each available API endpoint in detail, including the HTTP method, URL pattern, parameters, example requests, and response formats.

2.1 Get Latest Exchange Rates

Returns the current live exchange rate for one base currency against one or more target currencies. Supports multiple targets in a single request via comma-separated values.

```
GET /api/v1/rates?source={FROM}&target={TO}
```

Example — Single target currency:

```
curl -H "Authorization: Bearer art_live_your_api_key" \
"https://allratetoday.com/api/v1/rates?source=USD&target=EUR"
```

2.1.1 Response

```
HTTP/1.1 200 OK
Content-Type: application/json
X-Monthly-Limit: 300
X-Monthly-Used: 42

[
  {
    "rate": 0.9234,
    "source": "USD",
    "target": "EUR",
    "time": "2026-04-12T14:30:00Z"
  }
]
```

Example — Multiple target currencies:

```
curl -H "Authorization: Bearer art_live_your_api_key" \
"https://allratetoday.com/api/v1/rates?source=USD&target=EUR,GBP,JPY,CAD"
```

2.1.2 Response (Multiple Targets)

```
[
  { "rate": 0.9234, "source": "USD", "target": "EUR", "time": "2026-04-12T14:30:00Z" },
  { "rate": 0.7891, "source": "USD", "target": "GBP", "time": "2026-04-12T14:30:00Z" },
  { "rate": 151.42, "source": "USD", "target": "JPY", "time": "2026-04-12T14:30:00Z" },
  { "rate": 1.3567, "source": "USD", "target": "CAD", "time": "2026-04-12T14:30:00Z" }
]
```

Note: Requesting 4 target currencies counts as 4 API requests toward your monthly limit.

2.1.3 Parameters

Name	Type	Required	Description
source	String	Yes	The base currency ISO 4217 code (e.g., USD, EUR, GBP). If omitted, USD is assumed.

Name	Type	Required	Description
target	String	Yes	One or more target currency ISO 4217 codes, comma-separated (e.g., EUR,GBP,JPY).
time	String	No	Specific time for the rate query. UTC time in ISO 8601 format.

2.1.4 Response Fields

Name	Type	Required	Description
rate	Number	—	The mid-market exchange rate from source to target currency.
source	String	—	The base currency ISO 4217 code.
target	String	—	The target currency ISO 4217 code.
time	String	—	ISO 8601 timestamp of when the rate was recorded.

2.2 Get Single Pair Rate

A simplified, unauthenticated endpoint that returns the current exchange rate for a single currency pair. Designed for quick lookups and lightweight integrations.

```
GET /api/rate?source={FROM}&target={TO}
```

Example:

```
curl "https://allratetoday.com/api/rate?source=EUR&target=LKR"
```

2.2.1 Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "rate": 415.28,
  "source": "wise"
}
```

2.2.2 Parameters

Name	Type	Required	Description
source	String	Yes	The base currency ISO 4217 code (e.g., USD, EUR, GBP).
target	String	Yes	The target currency ISO 4217 code (e.g., LKR, INR, JPY).

Note: This endpoint does not require authentication but is intended for simple, single-pair lookups only. For production use with multiple currencies, use the authenticated `/api/v1/rates` endpoint.

2.3 Get Historical Rates

Returns historical exchange rate data for a currency pair over a specified time period. Supports preset periods of 1 day, 7 days, 30 days, and 1 year.

```
GET /api/historical-rates?source={FROM}&target={TO}&period={PERIOD}
```

Example — 30-day history:

```
curl -H "Authorization: Bearer art_live_your_api_key" \
  "https://allratetoday.com/api/historical-rates?source=EUR&target=LKR&period=30d"
```

2.3.1 Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "source": "EUR",
  "target": "LKR",
  "data": [
    {
      "date": "2026-03-13T00:00:00.000Z",
      "rate": 358.4521,
      "timestamp": 1710288000000
    },
  ],
}
```

```
{
  "date": "2026-03-14T00:00:00.000Z",
  "rate": 360.1214,
  "timestamp": 1710374400000
},
...
],
"source_api": "wise",
"period": "30d"
}
```

2.3.2 Parameters

Name	Type	Required	Description
source	String	Yes	The base currency ISO 4217 code.
target	String	Yes	The target currency ISO 4217 code.
period	String	No	The time period for historical data. Accepted values: 1d (1 day — 24 hourly data points), 7d (7 days — daily, default), 30d (30 days — daily), 1y (1 year — sampled every 7 days).

2.3.3 Response Fields

Name	Type	Required	Description
source	String	—	The base currency ISO 4217 code.
target	String	—	The target currency ISO 4217 code.
data	Array	—	Array of historical data points, each containing date, rate, and timestamp.
data[].date	String	—	ISO 8601 date string for the data point.
data[].rate	Number	—	The mid-market exchange rate at this date.
data[].timestamp	Number	—	Unix timestamp in milliseconds for the data point.
source_api	String	—	The upstream data provider identifier (e.g., "wise").
period	String	—	The period requested (1d, 7d, 30d, or 1y).

2.4 Get Historical Rate Period

Returns exchange rate data for a currency pair within a custom date range. Use the **from** and **to** date parameters to define the period.

```
GET
/api/v1/rates?source={FROM}&target={TO}&from={START_DATE}&to={END_DATE}
```

Example — Custom date range:

```
curl -H "Authorization: Bearer art_live_your_api_key" \
"https://allratetoday.com/api/v1/rates?source=USD&target=CAD&from=2026-01-01&to=2026-03-31"
```

2.4.1 Response

```
HTTP/1.1 200 OK
Content-Type: application/json

[
  {
    "rate": 1.3421,
    "source": "USD",
    "target": "CAD",
    "time": "2026-01-01T00:00:00Z"
  },
  {
    "rate": 1.3456,
    "source": "USD",
    "target": "CAD",
    "time": "2026-01-02T00:00:00Z"
  },
  ...
]
```

2.4.2 Parameters

Name	Type	Required	Description
source	String	Yes	The base currency ISO 4217 code.
target	String	Yes	The target currency ISO 4217 code (comma-separated for multiple).
from	String	Yes	Start date in YYYY-MM-DD format (ISO 8601).
to	String	Yes	End date in YYYY-MM-DD format (ISO 8601).
group	String	No	Grouping interval for the data points (e.g., day, hour).

2.5 Get Available Currencies

Returns a complete list of all supported currency codes, names, and symbols. This endpoint is cached for 24 hours and does not count toward your monthly API limit.

```
GET /api/v1/symbols
```

Example:

```
curl "https://allratetoday.com/api/v1/symbols"
```

2.5.1 Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Cache-Control: public, max-age=86400

{
  "currencies": [
    { "code": "AED", "name": "UAE Dirham", "symbol": "AED" },
    { "code": "AUD", "name": "Australian Dollar", "symbol": "A$" },
    { "code": "BDT", "name": "Bangladeshi Taka", "symbol": "Tk" },
    { "code": "BRL", "name": "Brazilian Real", "symbol": "R$" },
    { "code": "CAD", "name": "Canadian Dollar", "symbol": "CA$" },
    { "code": "EUR", "name": "Euro", "symbol": "€" },
    { "code": "GBP", "name": "British Pound", "symbol": "£" },
    { "code": "INR", "name": "Indian Rupee", "symbol": "₹" },
    { "code": "JPY", "name": "Japanese Yen", "symbol": "¥" },
    { "code": "USD", "name": "US Dollar", "symbol": "$" },
    ...
  ],
  "count": 160
}
```

Note: This endpoint does not require authentication and is cached for 24 hours.

2.5.2 Response Fields

Name	Type	Required	Description
currencies	Array	—	Array of currency objects.
currencies[].code	String	—	ISO 4217 three-letter currency code.
currencies[].name	String	—	Full English name of the currency.
currencies[].symbol	String	—	The currency symbol (e.g., \$, €, £, ¥).
count	Number	—	Total number of currencies returned.

3 SDKs & Libraries

AllRatesToday provides official SDKs in multiple programming languages. These SDKs handle authentication, request construction, error handling, and response parsing, allowing you to integrate exchange rate data with minimal code.

3.1 JavaScript / TypeScript SDK

Package: [@allratetoday/sdk](#)

Registry: npm — <https://www.npmjs.com/package/@allratetoday/sdk>

Requirements: Node.js 18+ or modern browser (ES modules)

Dependencies: Zero runtime dependencies

Installation

```
npm install @allratetoday/sdk
```

Quick Start

```
import { AllRatesToday } from '@allratetoday/sdk';

const client = new AllRatesToday('art_live_your_api_key');

// Get latest rate
const rates = await client.latest({ base: 'USD', symbols: ['EUR', 'GBP'] });
console.log(rates.EUR); // 0.9234

// Convert currency
const result = await client.convert({
  from: 'USD',
  to: 'EUR',
  amount: 1000
});
console.log(result.converted); // 923.40

// Get historical rates
const history = await client.historical({
  base: 'USD',
  date: '2025-01-15'
});
console.log(history.EUR); // 0.9180
```

3.2 Python SDK

Package: [allratetoday](#)

Registry: PyPI — <https://pypi.org/project/allratetoday/>

Requirements: Python 3.7+

Dependencies: Zero — uses only stdlib (urllib + json)

Installation

```
pip install allratetoday
```

Quick Start

```
from allratetoday import AllRatesToday

client = AllRatesToday('art_live_your_api_key')

# Get latest rates
rates = client.latest(base='USD')
print(rates['EUR']) # 0.9234

# Get historical rates
history = client.historical(base='USD', date='2025-01-15')
print(history['EUR']) # 0.9180

# List available currencies
currencies = client.currencies()
print(len(currencies)) # 160+
```

3.3 PHP SDK

Package: [allratetoday/sdk](#)

Registry: Packagist — <https://packagist.org/packages/allratetoday/sdk>

Requirements: PHP 7.4+, cURL extension, JSON extension

Installation

```
composer require allratetoday/sdk
```

Quick Start

```
<?php
use AllRatesToday\Client;

$client = new Client('art_live_your_api_key');

// Get latest rates
$rates = $client->latest(['base' => 'USD']);
echo $rates->EUR; // 0.9234

// Convert currency
$result = $client->convert([
    'from' => 'USD',
    'to' => 'EUR',
    'amount' => 1000
]);
echo $result->converted; // 923.40
```

3.4 React SDK

Package: [react-currency-localizer-realtime](#)

Registry: npm — <https://www.npmjs.com/package/react-currency-localizer-realtime>

Requirements: React 16.8+ (hooks support)

Bundle Size: ~10KB minified (~4KB gzipped) — zero runtime dependencies beyond React

Installation

```
npm install react-currency-localizer-realtime
```

Quick Start

```
import { useCurrencyLocalizer } from
'react-currency-localizer-realtime';

function PricingCard({ priceUSD }) {
  const { convert, userCurrency, loading }
  = useCurrencyLocalizer({
    apiKey: 'art_live_your_api_key',
    baseCurrency: 'USD'
  });

  if (loading) return <Spinner />;

  return (
    <div className="price">
      {convert(priceUSD)} {userCurrency}
    </div>
  );
}
```

Key features: Automatic IP-based currency detection, built-in rate caching, SSR compatible (Next.js, Remix), full TypeScript support.

4 Appendix A — Supported Currencies

AllRatesToday supports over 160 world currencies. Below is a representative list of the most commonly used currencies available through the API. For a complete, up-to-date list, use the [GET /api/v1/symbols](#) endpoint.

Code	Currency Name	Code	Currency Name	Code	Currency Name
AED	UAE Dirham	ARS	Argentine Peso	AUD	Australian Dollar
BDT	Bangladeshi Taka	BGN	Bulgarian Lev	BRL	Brazilian Real
CAD	Canadian Dollar	CHF	Swiss Franc	CNY	Chinese Yuan
COP	Colombian Peso	CZK	Czech Koruna	DKK	Danish Krone
EGP	Egyptian Pound	EUR	Euro	GBP	British Pound Sterling
GHS	Ghanaian Cedi	HKD	Hong Kong Dollar	HUF	Hungarian Forint
IDR	Indonesian Rupiah	ILS	Israeli Shekel	INR	Indian Rupee
JPY	Japanese Yen	KES	Kenyan Shilling	KRW	South Korean Won
LKR	Sri Lankan Rupee	MAD	Moroccan Dirham	MXN	Mexican Peso
MYR	Malaysian Ringgit	NGN	Nigerian Naira	NOK	Norwegian Krone
NZD	New Zealand Dollar	PEN	Peruvian Sol	PHP	Philippine Peso
PKR	Pakistani Rupee	PLN	Polish Zloty	RON	Romanian Leu
RUB	Russian Ruble	SAR	Saudi Riyal	SEK	Swedish Krona
SGD	Singapore Dollar	THB	Thai Baht	TRY	Turkish Lira
TWD	Taiwan Dollar	TZS	Tanzanian Shilling	UAH	Ukrainian Hryvnia
UGX	Ugandan Shilling	USD	US Dollar	VND	Vietnamese Dong
ZAR	South African Rand	ZMW	Zambian Kwacha		

This is a partial list. The API supports 160+ currencies in total. Use the [/api/v1/symbols](#) endpoint to retrieve the complete, current list of supported currencies.

5 Appendix B — Error Codes Reference

The following table lists all possible error responses from the API:

HTTP Status	Code	Message
400	INVALID_PARAMS	Missing or invalid query parameters. Check that source and target are valid ISO 4217 currency codes.
400	INVALID_CURRENCY	The specified currency code is not supported. Use /api/v1/symbols for valid codes.
400	INVALID_DATE	The date parameter is not in valid YYYY-MM-DD format or is out of range.
400	INVALID_PERIOD	The period parameter must be one of: 1d, 7d, 30d, 1y.
401	AUTH_REQUIRED	No API key provided. Include an Authorization: Bearer header.
401	INVALID_KEY	The API key is invalid or has been revoked.
401	KEY_DISABLED	The API key has been disabled by an administrator.
401	ACCOUNT_DISABLED	Your account has been disabled. Contact support.
401	EMAIL_NOT_VERIFIED	Your email address has not been verified. Check your inbox.
429	MONTHLY_LIMIT	Monthly API request limit exceeded. Upgrade your plan or wait for reset.
429	RATE_LIMIT	Too many requests in the current time window. Slow down.
500	INTERNAL_ERROR	An unexpected server error occurred. Please retry.

HTTP Status	Code	Message
500	UPSTR EAM_E RROR	The upstream data provider returned an error. Please retry.
503	SERVIC E_UNA VAILAB LE	The service is temporarily unavailable for maintenance.

Error Response Format:

```
{  
  "error": "Human-readable error description",  
  "code": "MACHINE_READABLE_CODE",  
  "docs": "https://allratetoday.com/docs"  
}
```

6 Appendix C — Package Limit Alerts

When you are nearing your monthly package limit, AllRatesToday will send email alerts to the email address associated with your account. Notifications are sent at the following thresholds:

Threshold	Alert Level	Description
75%	Warning	You have used 75% of your monthly API request allowance. Consider monitoring usage or upgrading your plan.
90%	Critical	You have used 90% of your monthly allowance. You are approaching your limit. Upgrade recommended.
100%	Limit Reached	You have reached your monthly limit. Further API requests will return 429 until the next billing period.

You can also monitor your current usage in real-time by checking the **X-Monthly-Used** and **X-Monthly-Limit** response headers returned with every API response, or by visiting your profile dashboard at <https://allratetoday.com/profile>.

To avoid service interruption, we recommend setting up monitoring on the response headers and upgrading your plan proactively when approaching your limit.

7 Appendix D — Changelog

Version 1.0 — April 2026

- Initial release of the AllRatesToday Currency Data API.
- 5 API endpoints: Latest Rates, Single Pair, Historical Rates, Historical Period, Available Currencies.
- Official SDKs for JavaScript/TypeScript, Python, PHP, and React.
- Support for 160+ world currencies with mid-market rates.
- Data sourced from Reuters (Refinitiv) and interbank market feeds.
- Deployed on Cloudflare Workers (300+ global edge locations).
- Bearer token authentication with API key format: `art_live_*`.
- Monthly package limits with email alert notifications at 75%, 90%, and 100%.
- Rate limiting with `X-RateLimit-*` response headers.
- CORS support for browser-based applications.

AllRatesToday

Website: <https://allratetoday.com>

Register: <https://allratetoday.com/register>

Documentation: <https://allratetoday.com/developers>

Pricing: <https://allratetoday.com/pricing>

API Status: <https://allratetoday.com/status>

GitHub: <https://github.com/allratetoday>

NPM: <https://www.npmjs.com/package/@allratetoday/sdk>

PyPI: <https://pypi.org/project/allratetoday/>

Packagist: <https://packagist.org/packages/allratetoday/sdk>

Contact: <https://allratetoday.com/contact>

LinkedIn: <https://www.linkedin.com/company/allratetoday/>

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